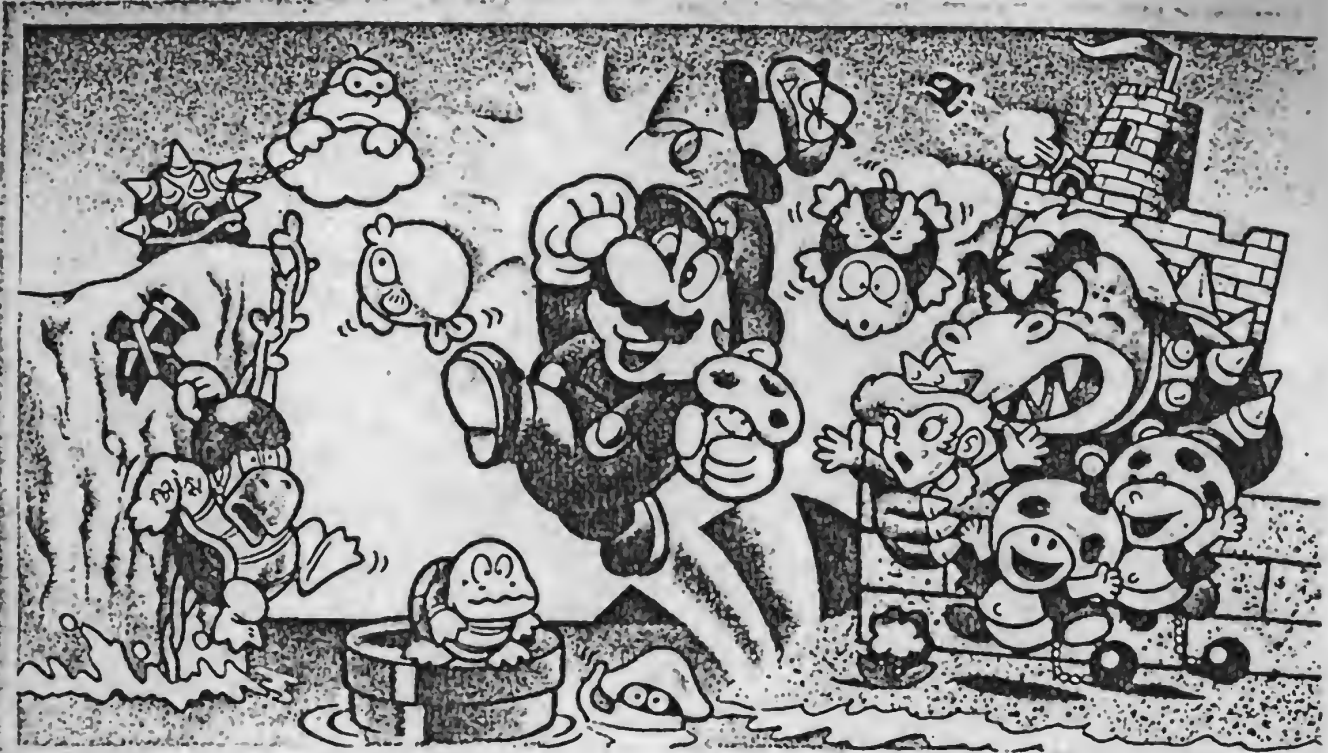


CN-171

SUPER MARIOBROS.



IF TAKING A MASHROO"

IF TAKING A FLOWER,

IF TAKING A STAR,



MARIO BECOMES SUPER MARIO. MARIO BECOMES FIRE MARIO.

MARIO BECOMES INVINCIBLE MARIO.

HOW TO PLAY

* START POINT AND TIME

GAME STARTS FROM HEAD OF EVERY AREA. WHEN MARIO IS MOVING TO HALF OF COURSE, IF HE IS ENCLOSED BY ENEMY, HE CAN START AGAIN FROM HALFWAY OF COURSE.

IN THE LAST CASTLE, YOU START FROM ENTRANCE.

WHEN MARIO STARTS, TIME ON UPSIDE RIGHT OF SCREEN RUNS SHORT.

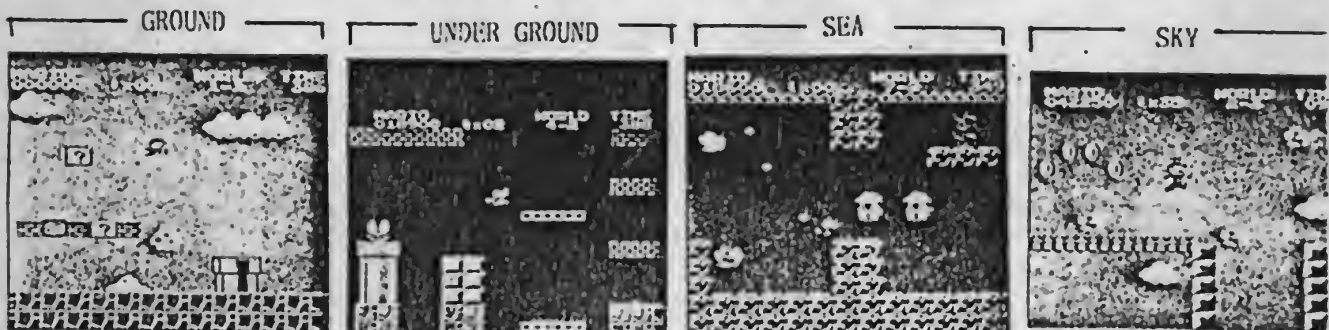
WHEN REACHING COAL, REMAINING TIME IS ADDED AS A POINT.

IN THE LAST CASTLE, NO TIME BONUS.

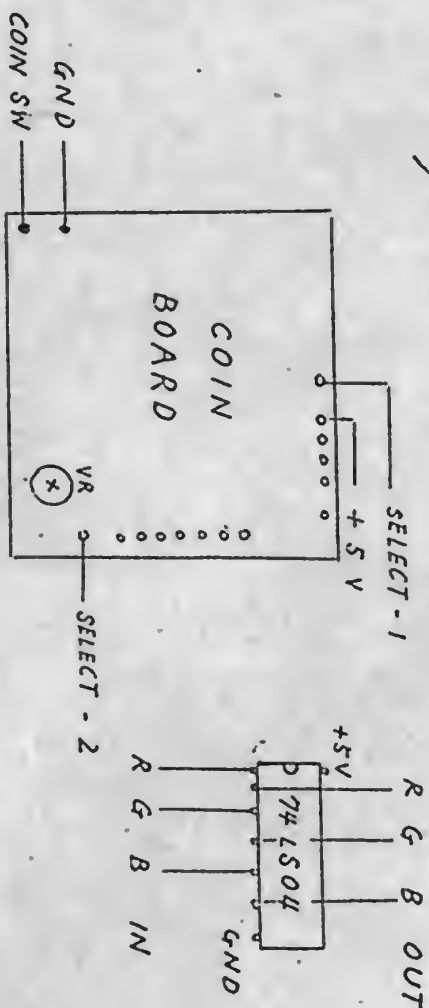
* COAL

AT THE END OF EACH AREA THERE IS A SMALL CASTLE, AND IN FRONT OF IT BIG STAIRS AND POLE WITH FLAG. THE HIGHER POINT OF THE POLE YOU HOLD ON, THE MORE YOU GET BONUS POINT

IN TERMS OF PROGRAM, DEPENDING ON TELEVISION SET, AS THE CASE MAY BE, SOME PARTS OF LETTER ARE MISSING.



PARTS SIDE		SOLDER SIDE	
GND	1	A	GND
GND	2	B	GND
+5V	3	C	+5V
+5V	4	D	+5V
+12V	5	E	+12V
	6	F	
COIN 2	7	H	COIN 1
2 PLAY	8	J	1 PLAY
2P RIGHT	9	K	1P RIGHT
2P LEFT	10	L	1P LEFT
2P UP	11	M	1P UP
2P DOWN	12	N	1P DOWN
2P A-SW	13	P	1P A-SW
2P B-SW	14	R	1P B-SW
	15	S	SERVICE
	16	T	
VIDEO C	17	U	VIDEO R
VIDEO SYNC	18	V	VIDEO B
	19	W	TV AUDIO
+24V	20	X	COUNTER
GND	21	Y	GND
GND	22	Z	GND



Potentio
AUDIO,
von Rakhin

- 1
- 2 } END
- 3
- 4 LAUTSPRECHER
- 5 +12V
- 6 END

Super Mario Bros.

Steckerbelegung Standort Ad.K. 28pol.

<u>Oben.</u>		<u>Unten</u>
GND	1	GND
GND	2	GND
+ 5 V	3	+ 5 V
+ 5 V	4	+ 5 V
+ 12 V	5	+ 12 V
Lautsprecher 1	6	Lautsprecher 1 GND
Auf 1 Spieler	7	Auf 2 Spieler
Ab 1 Spieler	8	Ab 2 Spieler
Links 1 Spieler	9	Links 2 Spieler
Rechts 1 Spieler	10	Rechts 2 Spieler
Start 1 Spieler	11	Start 2 Spieler
Action A1 Spieler	12	Action 2 Spieler
Action B1 Spieler	13	Action 2 Spieler
	14	
	15	
Münzschalter 1	16	Münzschalter 2
	17	
	18	
Münzzähler 1	19	Münzzähler 2
	20	
	21	
TV Rot	22	TV Blau
TV Grün	23	
Synchron	24	
	25	
	26	
GND	27	GND
GND	28	GND

Super Mario Bros

8-Map

CONNECTION OF INPUT/OUTPUT

A1, D1 nur für Stand
P1 mit P12 überbrücke

Oben

Unten

GND	1	GND
GND	2	GND
+5V	3	+5V
+5V	4	+5V
+12V	5	+12V

	6	
Coin 2	7	Coin 1
1P Start	8	1P Start
2P Rechts	9	1P Rechts
2P Links	10	1P Links
2P Oben	11	1P Oben
2P Unten	12	1P Unten
2P Sprung	13	1P Sprung
2P Schnell	14	1P Schnell
	15	Service
	16	
TV Grün	17	TV Rot
TV Sync	18	TV Blau
Lautspr.	19	
	20	Zähler
GND	21	GND
GND	22	GND

44P-062-FCC
Harness

1	0V0
A	0V0
2	0V0
B	0V0
3	+5V
C	+5V
4	+5V
D	+5V
E	+12V
F	+12V
7	S COM1
H	M COM1
8	S COM2
J	M COM2
9	S RED
K	M RED
10	S GREEN
L	M GREEN
11	VIDEO 0V0
M	VIDEO 0V0
12	S BLUE
N	M BLUE
13	S SYNC
P	M SYNC
14	
R	
15	SPEAKER2
S	SPEAKER1
16	+24V
T	+24V
17	S COUNTER
U	M COUNTER
18	
V	
19	S SERVICE
W	M SERVICE
20	S SOUND
X	M SOUND
21	0V0
Y	0V0
22	0V0
Z	0V0

C-062-44P
EX-01 PCB

1	0V0
A	0V0
2	S1 RIGHT
B	M1 RIGHT
3	S1 LEFT
C	M1 LEFT
4	S1 UP
D	M1 UP
5	S1 DOWN
E	M1 DOWN
6	S1 A SWITCH
F	M1 A SWITCH
7	S1 B SWITCH
H	M1 B SWITCH
8	S SELECT1
J	M SELECT1
9	
K	
10	S SELECT2
L	M SELECT2
11	
M	
12	S2 RIGHT
N	M2 RIGHT
13	S2 LEFT
P	M2 LEFT
14	S2 UP
R	M2 UP
15	S2 DOWN
S	M2 DOWN
16	S2 A SWITCH
T	M2 A SWITCH
17	S2 B SWITCH
U	M2 B SWITCH
18	0V0
V	0V0

36P-062-FCC
Harness

1	0V0
A	0V0
2	0V0
B	0V0
3	+5V
C	+5V
4	+5V
D	+5V
5	+12V
E	+12V
F	
7	Coin 2
H	Coin 1
8	2 Play
J	1 Play
9	2P Right
K	1P Right
10	2P Left
L	1P Left
11	2P Up
M	1P Up
12	2P Down
N	1P Down
13	2P Abo
P	1P Abo
14	2P Bbo
R	1P Bbo
15	
S	Service
T	
17	Video 0
U	Video R
18	Video Sync
V	Video B
19	Lautspr
W	Handshake
20	Handshake
X	Coin 2
21	0V0
Y	0V0
22	0V0
Z	0V0

Oben

22

DIP SW 2

	1	2	3	4	5	6	7	8
1coin 1credit	OFF	OFF	OFF					
1coin 2credit	OFF	OFF	ON					
1coin 3credit	OFF	ON	OFF					
1coin 4credit	OFF	ON	ON					
2coin 1credit	ON	OFF	OFF					
3coin 1credit	ON	OFF	ON					
4coin 1credit	ON	ON	OFF					
FREE PLAY	ON	ON	ON					

NUMBER OF MARIO 3 OFF
 " 4 ON

EXTRA SCORE 50,000PTS OFF
 NO SCORE ON

DIFFICULTY
 EASY 1 OFF OFF
 | 2 OFF ON
 | 3 ON OFF
 DIFFICULT 4 ON ON

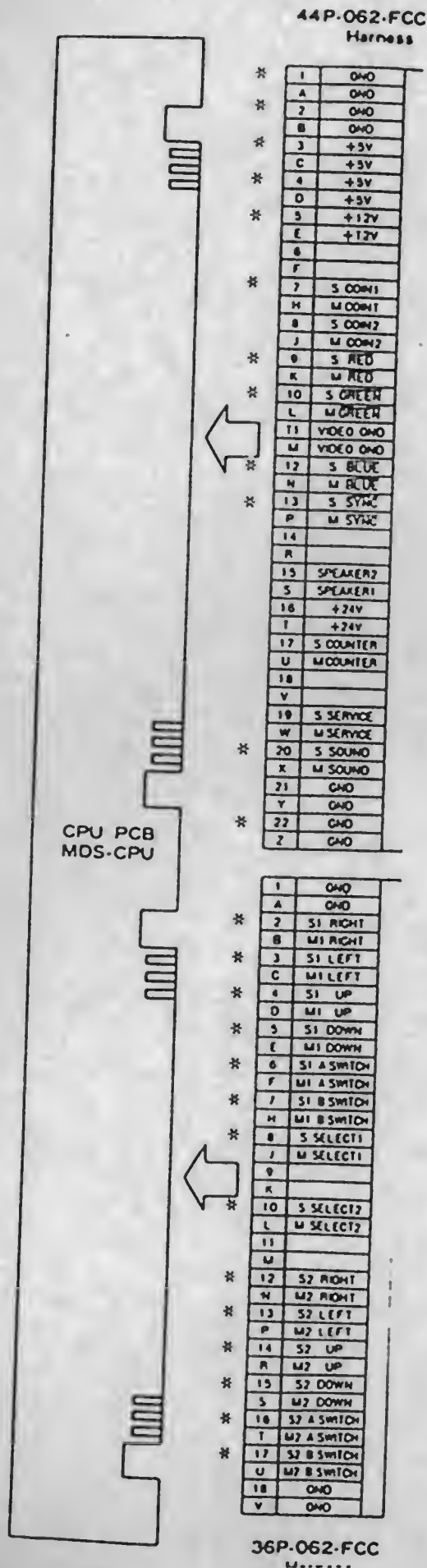
DIP SW 1 --- NOT USE

S U P E R M A R I O B R O S

MGS
P.C. BOARD SET

OPERATORS MANUAL

CONNECTION OF INPUT/OUTPUT



"*" --- ONLY USE.

HOW TO CARE AV-01 BOARD

There are Video Signal Converter (Negative - Positive) and Audio Power Amp Circuit. Even though there is only one of them, board works correctly.

1. VIDEO SIGNAL CONVERTER

1-1 Position of Connector Pin

P1 VIDEO IN

PIN No.	SIGNAL
1	GREEN
2	RED
3	BLUE
4	GND
5	GND
6	SYNC

P2 VIDEO OUT

PIN No.	SIGNAL
1	GREEN
2	RED
3	BLUE
4	GND
5	GND
6	SYNC

1-2 Adjustment of VIDEO SIGNAL CONVERTER

Each R,G,B of Video Signal Level is adjustable by Adjustable V. R. Please adjust according to level of your Monitor T.V.

1-3 SYNC SIGNAL CONVERT

As SYNC Signal is usually Negative, only simple circuit is set up. If Positive SYNC Signal is necessary, insert IC SN74LS04 and cut CL1.

1-4 CABLE

I/O Cable should be no longer than 1m.

2. AUDIO POWER AMP CIRCUIT

2-1 Position of Connector Pin

P4 SOUND IN

PIN No.	SIGNAL
1	SOUND SIG
2	
3	

P5 SOUND OUT

PIN No.	SIGNAL
1	SPEAKER
2	SPEAKER
3	* * *

2-2 Setting up of Input Signal

According to Input Signal Level of Audio Power Amp, change the circuit and please use with proper Input Level. If it is used over proper Input Level, sound would be saturated or Volume VR 4 would be impossible to adjust sound.

INPUT LEVEL	HOW TO CHANGE CIRCUIT
2V	Short SL1 with solder, and cut CL2
1V	Needless to change circuit
0.5V	Short SL2 with solder, and cut CL2

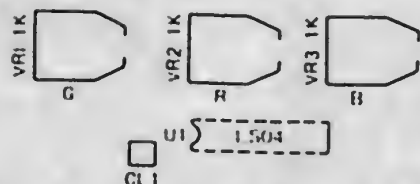
Impedance	4	8
MAX. Input	12W	6W
Audio Power Amp Max. Output	12W (4)	

3-1 INPUT CONNECTOR

PIN No.	SIGNAL
1	+5V
2	+12V
3	GND * 1 *1 GND for VIDEO SIGNAL CONVERTER
4	GND * 2 *2 GND for AUDIO POWER AMP CIRCUIT

+5V	0.2A	For Video Signal Converter
+12V	1.5A	For Audio Power Amp Circuit

GND of VIDEO SIGNAL CONVERTER, and Audio Power Amp Circuit is independent from AV-01 Board completely. Please connect each GND correctly.



DIP SW 2

	1	2	3	4	5	6	7	8
1coin 1credit	OFF	OFF	OFF					
2coin 1credit	OFF	OFF	ON					
3coin 1credit	OFF	ON	OFF					
1coin 2credit	OFF	ON	ON					
1coin 3credit	ON	OFF	OFF					
1coin 4credit	ON	OFF	ON					
1coin 5credit	ON	ON	OFF					
FREE PLAY	ON	ON	ON					

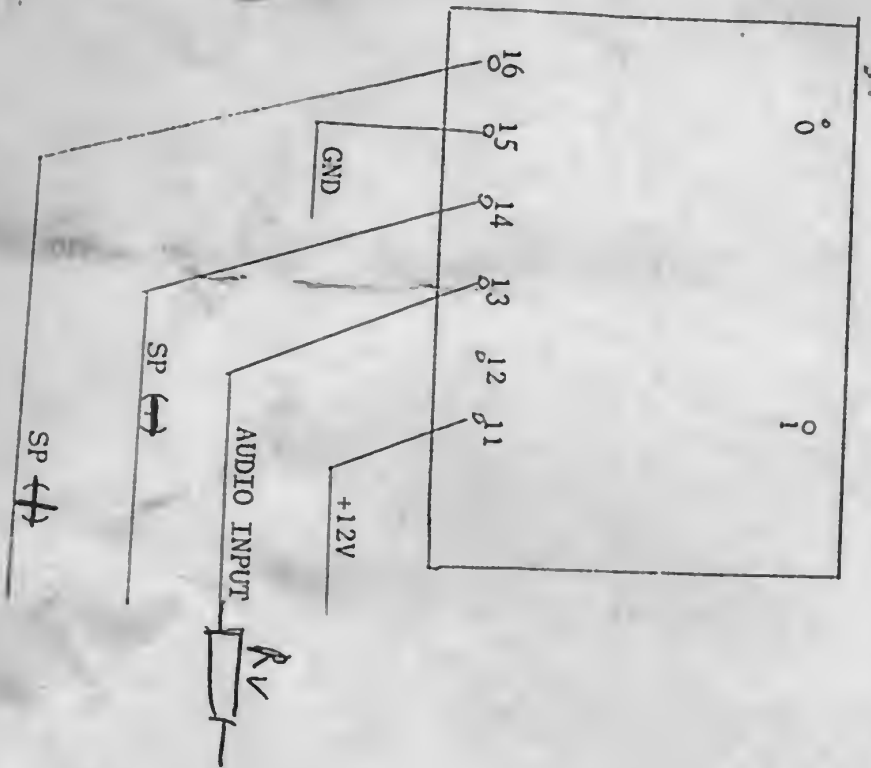
NUMBER OF MARIO 3 OFF
" 2 ON

EXTRA SCORE 50,000PTS OFF
NO SCORE ON

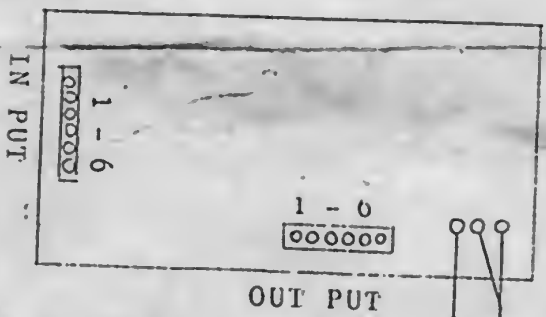
DIFFICULTY
EASY 1 OFF OFF
| 2 OFF ON
| 3 ON OFF
DIFFICULT 4 ON ON

DIP SW 1 --- NOT USE

Audio Power Amp P.C.B.



T.V. Interface P.C.B. 1



VCC (+12V) . . .
GND

<u>Input</u>	Pin No.
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

1. Red
2. Green
3. Blue
4. GND
5. GND
6. Sync

Out Put
Pin No.

1. Red
2. Green
3. Blue
4. GND
5. GND
6. Sync